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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/040,456	01/09/2002	Kia Silverbrook	WSM08US	2639
24011	7590	10/21/2003	EXAMINER	
SILVERBROOK RESEARCH PTY LTD 393 DARLING STREET BALMAIN, 2041 AUSTRALIA			HECKENBERG JR, DONALD H	
			ART UNIT	PAPER NUMBER
			1722	

DATE MAILED: 10/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/040,456	SILVERBROOK, KIA	
	Examiner	Art Unit	
	Donald Heckenberg	1722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-6 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) = . | 6) <input type="checkbox"/> Other: . |

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1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the concave or convex base recited in claims 3-5 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. The following are suggestions that would improve the clarity of the claims.

Claim 1 does not contain a preamble and transitional phrase as in convention U.S. claim format. The claim is understood to comprise a pair of molds formed substantially of silicon or silicon alloy, with the additional features recited in lines 2-7 of the claim. However, it would be better to begin the claim: "An apparatus for molding a sheet of thermoplastic material into an array of microstructures comprising..." and then recite the features of the apparatus including the pair of silicon or silicon alloy molds.

Claim 2, line 2 recites "in plan view" which apparently should read "in plain view."

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3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 3-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Salatino et al. (U.S. Pat. No. 5,915,168).

Salatino discloses a pair of silicon planar wafers (200 and 260). Each of the wafers is substantially planar with a working face (the two surfaces facing each other in figure 2) and opposite rear faces. The wafers each have micro fabricated recesses in their working faces which when the working faces are placed face to face, define at least one cavity (241) between the wafers. The recesses on the wafers are configured such that the wafers only contact each other on the working faces when the working faces are placed face to face (see figures 2-3). Further the recess are shaped as such to form bases concave to the working faces of the wafers and thus form a lens shaped cavity between the wafers (see figure 3).

Claim 1 recites that the wafers are molds for molding a sheet of thermoplastic material into an array of

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microstructures. Written as such, this limitation is directed at the intended use of the apparatus. It is well settled that the intended use of the apparatus is not germane to issue of patentability. In re Casey, 370 F.2d 576, 580 152 USPQ 235, 238 (CCPA 1967); In re Otto, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963). In the instant case, as Salatino discloses all of the apparatus features, thus the reference anticipates the claim.

Claim 6 recites that the working surfaces have been polished using conventional semiconductor wafer polishing techniques and the recesses have been formed using conventional semiconductor etching techniques. These limitations are written as such to describe how the claimed apparatus is made, thus making the apparatus a product of these limitations. The patentability of a product does not depend on its method of production. In re Thorpe, 777 F.2d 695, 227 USPQ 964 (Fed. Cir. 1985); In re Brown, 459 F.2d 531, 173 USPQ 685 (CCPA 1972); In re Pilkington, 411 F.2d 1345, 162 USPQ 145 (CCPA 1969). Therefore, Salatino anticipates these limitations.

5. Claim 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent

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form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record fails to teach or suggest an apparatus comprising the combination of features recited in claim 2. The closest prior art disclosed by Salatino is described above. Salatino fails to teach or suggest a groove formed in the working face of one of the wafers wherein the groove defines a perimeter wall portion extending from the edges of a central portion of a cavity formed by the recess in the working face of the other wafer.

7. The following cited reference not relied upon is considered pertinent to the instant application:


Japanese Pub. 2002-368028 discloses a molding process for forming caps on silicon wafers.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald Heckenberg whose telephone number is (703) 308-6371. The

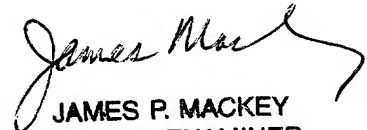
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examiner can normally be reached on Monday through Friday from
9:30 A.M. to 6:00 P.M.

If attempts to reach the examiner by telephone are
unsuccessful, the examiner's supervisor, Wanda Walker, can be
reached at (703) 308-0457. The official fax phone number for
the organization where this application or proceeding is
assigned is (703) 972-9306. The unofficial fax phone number is
(703) 305-3602.



Donald Heckenberg
October 10, 2003



JAMES P. MACKEY
PRIMARY EXAMINER

10/14/03